



# UNITED STATES PATENT AND TRADEMARK OFFICE

80  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,994	10/22/2003	Chul-Soo Park	P56976	8994
8439	7590	04/27/2005	EXAMINER	
ROBERT E. BUSHNELL 1522 K STREET NW SUITE 300 WASHINGTON, DC 20005-1202			STASHICK, ANTHONY D	
			ART UNIT	PAPER NUMBER
			3728	

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/689,994	PARK, CHUL-SOO	
	Examiner Anthony Stashick	Art Unit 3728	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on \_\_\_\_\_.  
2a)  This action is **FINAL**.                    2b)  This action is non-final.  
3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-15 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 22 October 2003 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Lyons 5,513,448. Lyons '448 discloses all the limitations of the claims including the following: upper and lower caps 36, 34 which are symmetrical to each other (see Figure 3) and have a plurality of annular flanges (that shown in Figure 3 as projections from the inner surface of each cap) projected; the annular flanges having insert grooves (the center portion of the projections) on the inside surface facing each other; coil springs (shown in Figure 3) which integrally connect the upper and lower caps with both opposite ends forcedly inserted into annular flange insert grooves of the upper and lower caps and have a predetermined elastic force (all springs have a predetermined elastic force); the coil springs have a rectangular cross-section (cut coil spring shown in Figure 3).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 11-12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Orlowski et al. 6,006,449 in view of Lombardino 6,055,747, Chee 5,384,977 and Falkner 426,495. Orlowski et al. '449 discloses all the limitations substantially as claimed including the following: an upper member 22 that wraps and protects the instep and ankle; a cushion member 24 attached to the upper member that improves frictional forces between the sole of the foot and the ground; the cushion member 24 having a forefoot portion and a heel portion (see Figure 1) with a recess 34, 36 of a predetermined depth located in each; a buffering unit 30 arranged in the respective recesses of the forefoot and heel portions of the cushion member for absorbing shocks while the wearer is walking or running (see Figure 1); the buffering unit comprising upper 38, 52 and lower 38, 52 caps which are symmetrical to each other; a plurality of annular flanges 66 projecting from the inner surface of each cap; the annular flanges having insert grooves (inner section of the flanges) on the inside surfaces facing each other; coil springs 40, 54 that integrally connect the upper and lower caps with both opposite ends being forcedly inserted into the annular flange insert grooves of the upper and lower caps (see Figures 3-5 and 8) with the springs having a predetermined elastic force (all springs have a predetermined elastic force); the coil springs are compressed in between the fixed caps (see Figures 4, 5 and 8, the force applied to the heel greater than that applied to the forefoot area occurs during use of the shoe). Orlowski et al. '449 does not teach the air pumping unit, the bottom sole with through holes, the friction member attached to the bottom contact surface of the sole and the upper sutured to the cushion. Lombardino '747 teaches that a cushion member can be sutured to upper member (see stitching in front area of Figure 1) to aid in holding the upper to the cushion member. Furthermore, Lombardino '747 teaches that a friction member 12 can be attached to the bottom surface of the

cushion member for forming a friction with the ground to give the shoe better grip. Therefore, it would have been obvious, to one of ordinary skill in the art at the time the invention was made, to stitch the upper of Orlowski et al. '449 to the cushion, as taught by Lombardino '747, to aid in firmly holding the upper to the cushion and to place a friction member on the bottom of the sole to help the shoe gain traction.

Chee '977 teaches that an air-pumping unit 4 can be arranged in the recess of the heel portion to perform an auxiliary buffering action and supply air onto the forefoot portion with the air-pumping unit comprising an air pump 6a arranged in the recess of the heel portion and compressing air by a shock from the upside. Furthermore, Chee '977 teaches that an air supply pipe 202 may be extended from one side of the air pump to penetrate the recess of the forefoot portion and supply compressed air from the air pump to the recess of the forefoot portion to aid in ventilating the shoe. Therefore, it would have been obvious, to one of ordinary skill in the art, to place an air pumping unit, such as that taught by Chee '977, in the recess of the sole of Orlowski et al. '449, to aid in cushioning the impact of the user's foot with the ground and to help ventilate the shoe.

Falkner '495 teaches that bottom sole D can be mounted on the upper part of the cushion member C and to which the foot of the sole of the user is tightly attached and that this bottom sole can contain a plurality of through holes d formed on the forefoot portion to aid in ventilating the shoe of the wearer during use. Therefore, it would have been obvious, to one of ordinary skill in the art, to place a bottom sole with through holes located in it on top of the cushion member as modified above to aid in ventilating the shoe while also giving better cushioning for the user.

With respect to the limitations of claim 12, since the “formed by” statement is a method step and not a product as claimed, the method of how the shock absorbing member is formed is not required to meet the claim of the product.

5. Claims 5, 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1 and 3 above in view of Shin et al. 5,975,861. The references as applied to claim 3 above disclose all the limitations of the claims except for the air supply pipe being formed as a groove on the cushion member and a projecting cushion projecting towards the heel of the wearer being form on the heel portion. Shin et al. ‘861 teaches that an air supply pipe that delivers air from the heel to the forefoot section of a cushion member can be formed as a groove 34 in the cushion member (see Figure 1) and that the heel portion of the ventilation member can have a protruding cushion 11 in the heel section facing the heel of the user to aid in better compressing the unit to give better air flow. Therefore, it would have been obvious, to one of ordinary skill in the art, to make the air pipe of the references as applied to claim 3 above as a groove in the cushion member, as taught by Shin et al. ‘861, to use less separate piece for the air flow system requiring less assembly. Further it would have been obvious to place a protruding cushion, such as that shown in Shin et al. ‘861, in the heel area of the references as applied to claim 1 above, to aid in gaining better compression and more flow of air when compressed.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lyons 5,513,448 as applied to claim 7 above, in view of Dixon 5,544,431. Lyons ‘448 as applied to claim 7 above discloses all the limitations of the claim except for the auxiliary buffering body sandwiched between the upper and lower caps and located adjacent each coil. Dixon ‘431 teaches that, in a shock absorbing buffering unit using springs, an auxiliary buffering body 52, 50 can be placed

within the unit and next to the springs to aid in cushioning the impact to the user's foot while also allowing for adjusting the resiliency of the unit towards the activity planned. Therefore, it would have been obvious, to one of ordinary skill in the art at the time the invention was made, to place an auxiliary buffering body, such as that taught by Dixon '431, inside the heel unit and between the springs to allow for more adjustment of the resiliency of the unit as well as to aid in cushioning the impact to the user's foot.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 1 above in view of Dixon 5,544,431. The references as applied to claim 1 above disclose all the limitations of the claim except for the transparent window located on the heel portion to view the springs. Dixon '431 teaches that a shoe heel portion with a spring unit can have windows 33 located on the side that allow the user to see which insert is in place and decide whether that insert is the proper one for the activity about to be performed. Therefore, it would have been obvious, to one of ordinary skill in the art, to place a window, such as that taught by Dixon '431, in the heel of the references as applied to claim 1 above, to allow for the user to view whether the proper insert is being used for the desired activity.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being obvious over the references as applied to claim 9 above. The references as applied to claim 9 above disclose all the limitations of the claim except the auxiliary body being formed of rubber. It is well known in the art of shoemaking that foam has replaced rubber for cushioning purposes. Therefore, it would have been obvious, to one of ordinary skill in the art, to use rubber instead of foam for the cushioning member of the references as applied to claim 9 above, to aid in cushioning the impact to the user since rubber and foam, as cushions, are art accepted equivalents.

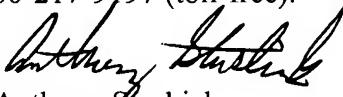
***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and are cited on form 892 enclosed herewith.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Stashick whose telephone number is 571-272-4561. The examiner can normally be reached on Monday-Thursday 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on 571-272-4562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Anthony Stashick  
Primary Examiner  
Art Unit 3728

ADS